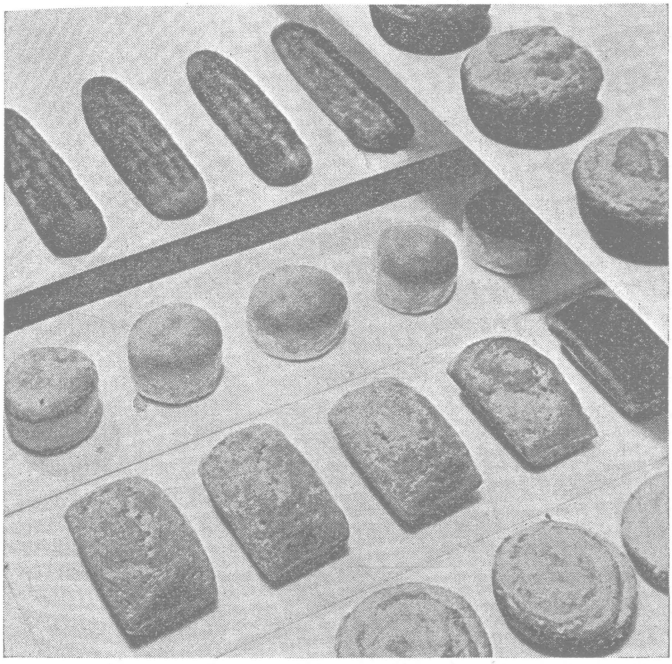
No. 162 BULLETIN OF THE AUGUST, 1935
AGRICULTURAL COLLEGE EXTENSION SERVICE, THE OHIO STATE UNIVERSITY

QUICK BREAD



By
MARY E. GERLAUGH, Extension Specialist in Nutrition
OSEE HUGHES, *Foods and Nutrition Division, School of Home Economics*
The Ohio State University

THE OHIO STATE UNIVERSITY AND U. S. DEPARTMENT OF AGRICULTURE, COOPERATING
AGRICULTURAL EXTENSION SERVICE, H. C. Ramsower, Director
FREE—Cooperative Agricultural Extension Work—Acts of May 8 and June 30, 1914

Quick Breads

SUCCESSFUL BAKING is dependent upon more than the possession of a good recipe. The worker must develop skill in measurement and in manipulation and she must learn how to manage her oven. She must also acquire information about the kinds and proportions of ingredients, and the oven temperatures which are most desirable for yielding good baked products of different types. As soon as possible, it is important for her to learn desirable characteristics of the various types of baked products, and to develop standards by which she may judge the quality of her own baked products.

MEASURING OF INGREDIENTS

A cook who appears to be successful in spite of apparent disregard for accurate measurements really does not entirely disregard measurements. She has learned to measure fairly accurately with her eye, and in addition has learned to judge by appearance and feel of mixtures whether they have the most favorable consistency or have been sufficiently manipulated.

Weighing of ingredients is more accurate than measuring, and tends toward producing greater uniformity of results, but the American woman is more accustomed to measuring and prefers it. It is necessary, therefore, that she learn to measure as accurately as possible.

Measuring Equipment

The standard measuring cup is of ½-pint or 8-ounce capacity. Cups can now be had which are based on United States standards and are so labeled. Subdivisions are marked on the cup for measuring ¼, ½, ¾, ⅓, and ⅔. The majority of cups do not show smaller subdivisions.

Individual cups for fractional as well as full cup measurements are also available. The fractional cups, if standardized, permit more accurate measurements than can be obtained in the cup with subdivisions.

Measuring spoons are not so well standardized as some cups are. Sets of spoons which measure 1 tablespoon, 1 teaspoon, ½ teaspoon, and ¼ teaspoon can be obtained.

Probably all spoons should be checked against a standard ½-pint cup. Sixteen level tablespoonfuls are required to fill one standard cup, and 3 teaspoons are equal to 1 tablespoon.

How to Measure

Granting that accurate measuring equipment is available, measuring problems still exist. Inaccuracies may occur through the manner in which the equipment is used. Also, variable and individual methods which may be used tend toward producing less uniform results than may be obtained when certain fairly well standardized methods of measuring are used. *All measures should be level.*

Flour.—The standard procedure is to measure flour after sifting once. Sifting should be fairly recent, since sifted flour tends to pack on standing. The quantity of flour sifted at one time is best limited to an amount which can be used before it tends to pack. In sifting graham or whole wheat flours, the bran is recombined with the sifted portion before measuring.

In filling the cup, dip flour with a tablespoon and fill lightly into the cup until the cup is heaping full; level off with the straight edge of a knife. It is important not to shake or tap the cup while it is being filled, as either will cause packing of the flour. Fractional cups are measured by leveling as accurately as possible to the mark. In filling tablespoon or teaspoon, fill spoon heaping full by dipping into flour, then level off with the edge of a knife. Half spoonfuls are measured by cutting in half lengthwise and scraping out one half. Quarter spoonfuls are measured by cutting a half crosswise into two equal portions and scraping out half.

Liquid.—Place cup upon a flat surface and fill as full as it can be filled without overflowing or spilling the contents when the cup is carefully lifted.

Fat.—Solid fats should be removed from the refrigerator long enough before measuring to permit them to become plastic. Very hard fats are difficult to measure accurately. Press the fat into the cup so that air spaces are forced out. Cut off level with the edge of a knife. In measuring fractional cups, cut off top surface at the division mark as accurately as possible. For measurements up to ¼ or ⅓ cup it is probably easier and quicker to measure by level tablespoons.

Sugar.—1. Granulated—Fill cup as for flour, omitting sifting.

2. Brown—Roll out lumps. Press sugar firmly into the cup. Measured in this way 1 cup of brown sugar is approximately equal to 1 cup of granulated sugar.

3. Confectioners'—Roll out lumps, then sift. Measure as for flour. One cup of confectioners' sugar measured in this way is slightly heavier than ½ cup of granulated sugar, about 1¾ cups of confectioners' sugar being equal to 1 cup of granulated sugar.

Sirup or Molasses.—Place the cup on a flat surface. Fill the cup. Because of the thickness of the liquid it may tend to round up higher than level full. Cut off level with the edge of a knife. Measure spoonfuls by pouring sirup into spoon and cutting off level with the edge of a knife.

Symbols for Measurements

t. = teaspoon	c. = cup
T. = tablespoon	f.g. = few grains

Table of Common Measurements Used in Cookery

16 T. = 1 c.	3 t. = 1 T.
4 T. = ¼ c.	2 c. = 1 pint
8 T. = ½ c.	4 c. = 1 quart
12 T. = ¾ c.	4 qts. = 1 gallon
5⅓ T. = ⅓ c.	8 oz. = 1 liquid ounce or ⅛ cup
10⅔ T. = ⅔ c.	2 T. = 1 cup or ½ pint

Familiarity with this table is useful enough to justify memorizing it. The following table of measurements and weights will also be found valuable because of its usefulness:

Approximate Number of Cups or Units in a Pound of some Common Food Materials

2¼ c. granulated sugar	4 c. grated cheese
1⅓ c. honey	2 c. butter or other fat
4 c. family or bread flour	About 10 average eggs (without shells)
4½ c. pastry flour	

Kinds of Ingredients

The principal ingredients used in foundation recipes for quick breads are flour, liquid, fat, egg, leavening agent, and salt. Sugar is added to some types of mixtures.

Flour.—It is important to understand the differences in white wheat flours in order to use them most effectively. Wheat flour contains a high percentage of starch and 10 to 14 per cent protein, most of which is gluten. Gluten is important for binding ingredients together and for its elastic or stretching property.

Bread flour has a slightly higher percentage of gluten and a much stronger and more elastic gluten than other types of flour. While most flours are blended, a strong bread flour is made chiefly from hard or spring wheat. Such flour is valuable chiefly for yeast breads, but may be used in quick breads.

Family or general purpose flour has a less strong and elastic gluten than bread flour. It may be a blend of hard and soft wheat flour or may be made entirely from soft or winter wheats. While designated "all-purpose" flour, it is more desirable for some quick breads than for other uses. With proper manipulation fermented breads and pie crusts can be satisfactorily made from it, but it is usually too strong a flour for good cakes if delicate texture is desired. Fruit cakes, pound cakes, and some types of cookies can be successfully made with family flour.

Pastry flour contains a weaker quality of gluten and a slightly lower percentage than is found in bread and family flours. Its chief use is for cakes and pastries, although it is very desirable for all quick breads. It may be more desirable than family flour for such products as waffles, in which tenderness is one of the most desirable characteristics.

Cake flours are specially prepared to reduce the gluten content to a very small amount (about 7 per cent). The more starchy content and weaker quality of gluten make them desirable chiefly for cakes.

Flours produced from locally grown wheats vary in gluten content and in baking quality, depending on the variety and quality of wheat from which the flours are made. Farmers who have their own wheat made into flour will doubtless need to learn how to use the flour. In Ohio, the bulk of the wheats produced are winter wheats. Spring wheat can be grown in the

northern section of the state, and may be blended with soft wheat to make an all-purpose flour. Winter wheat is subdivided into hard, semi-hard, and soft. Several semi-hard wheats are produced in large quantity in Ohio and yield a good quality of all-purpose flour.

Other flours which are commonly used in quick breads, as well as in yeast breads, are whole wheat, which as ordinarily milled does not contain quite all of the outer coat, and graham flour, which if properly made is the whole wheat grain ground. The term whole wheat or entire wheat flour is definitely a misnomer if the flour does not contain all parts of the grain. The committee on foods of the American Medical Association has taken a definite stand as to the nature of the whole or entire wheat products upon which it will place its seal of acceptance or approval. It states that "The terms whole wheat, entire wheat, and graham are synonymous terms, and may be used

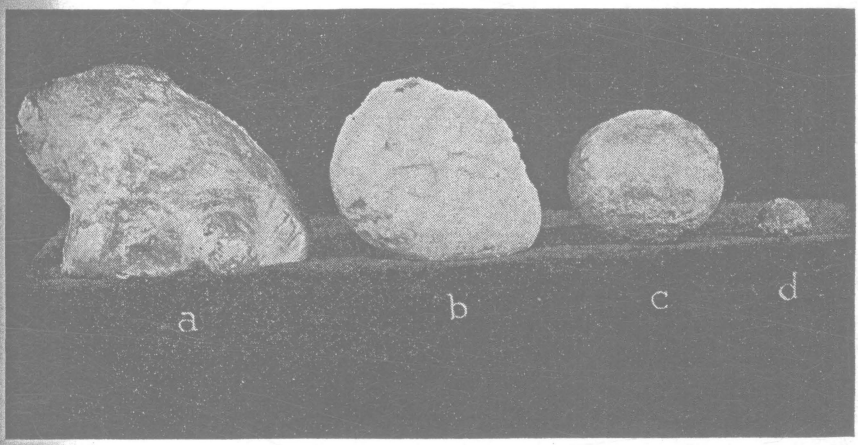


Fig. 1.—Gluten balls from equal weights of flour: (a) bread flour; (b) family flour; (c) pastry flour; (d) cake flour.

only when the sole cereal used in their manufacture is whole wheat." It is true that graham flour, even though presumably a whole wheat product, has been one of the most adulterated of grain products. It has often been made from a cheap grade of white flour mixed with varying proportions of bran, or of whole wheat with added bran.

Newer processes of milling whole wheat are producing a finer bran—in fact, a finer flour, which can be used without admixture of white flour to yield a good quality loaf of bread. It may not be possible to obtain the newer process flours in all localities, and it is at present difficult to know what one is buying in whole wheat flours without learning from the miller or from what he prints on his bags just what his whole wheat flour is.

Cracked wheat, while not a flour, is being used rather extensively for breads and quick breads. Bakers suggest that it be soaked in double the volume of water for 24 hours before using. It may be combined in varying proportions with whole wheat or white flour.

Bran is the outer coating of grains, and must be combined with some gluten-containing flour to bind it together. Probably family flour is preferable to pastry flour for this purpose, because of the fact that family flour contains more gluten.

Cornmeal or rolled oats, when used for flavor, are also usually combined with white flour to bind and prevent crumbling.

Fats.—Fats are used in all doughs and batters chiefly for shortening, although they also affect flavor and improve keeping quality. Some fats have more shortening effect than others, due largely to differences in composition and plasticity. A plastic fat is easily spread or manipulated, hence combines well with other ingredients. Lard has greater shortening power than various lard substitutes, while butter and oleomargarines have less shortening power than either lard or lard substitutes. Butter and oleomargarine contain as high as 15 or 16 per cent moisture, which decreases the amount of fat present as compared with lard and substitutes which are about 100 per cent fat. Also the composition of butter fat differs from that of lard and some other fats which have more shortening power.

The type of mixture in which the fat is used has some influence upon the shortening power of the fat. For example, in pie crust, oil has more shortening power than butter, while in cake the reverse is true.

Failure in the making of baked products is more likely to result from using too much rather than too little fat. In substituting lard in a recipe planned for butter (especially in mixtures such as cake in which a higher percentage of fat is used than in quick breads), only about 80 per cent as much should be used. For example, if 1 cup or 16 tablespoons of butter is called for, use 80 per cent of 16 tablespoons in substituting lard (12¾ tablespoons).

Liquid.—Milk is the liquid generally used in doughs and batters, but for some products other liquids such as water and fruit juices are satisfactory. If thick sour milk is used, it is necessary to increase the amount of liquid or decrease the amount of flour in order to obtain a mixture of the same consistency as that made from sweet milk or water. Soda is necessary to neutralize the acid of sour milk. Use ½ teaspoon of soda to 1 cup of well soured milk.

Leavening Agents.—Doughs and batters are made light by several methods, the most important of which are as follows:

1. Air may be added.

2. Steam may be formed from a high percentage of moisture in the mixture.

3. Chemical substances may react within the dough or batter to give off gas bubbles which expand on heating to leaven the product. Examples of such substances are:

   a. Sour milk and soda
   b. Molasses and soda
   c. Baking powders of various types

Baking powder is a combination of baking soda with an acid. It has a small amount of starch added to keep the soda and acid particles separate

until they are moistened to give off their gas. Baking powder cans should be kept tightly closed to exclude moisture, because moisture starts action of the acid and soda.

Baking powders are of several types, depending upon the kind of acid used. Commercial powders are of three general classes:

Tartrate—in which cream of tartar or tartaric acid (or a combination of the two) is used as the acid to combine with soda.

Phosphate—in which an acid phosphate is used.

Combination—in which more than one acid is used. An acid phosphate and an aluminum salt are used.

These types of powders react somewhat differently, the first two being rather rapid in their action and giving off most of their gas when moistened and before heating.

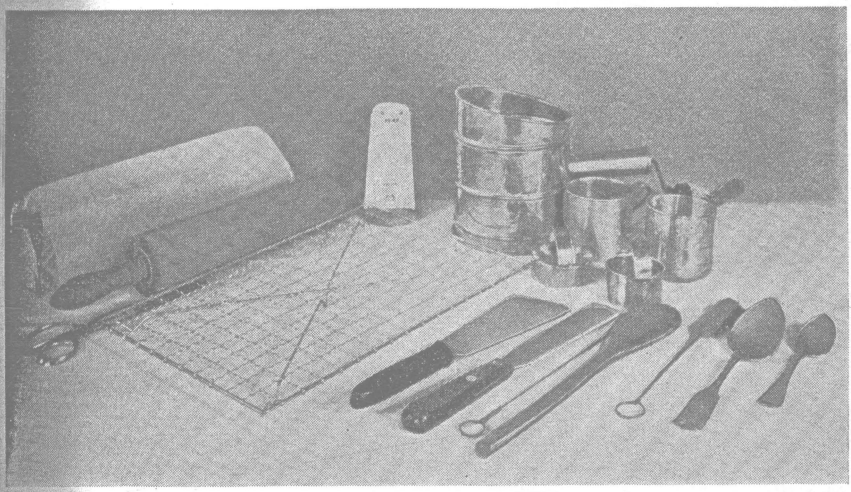


Fig. 2.—Miscellaneous equipment for home baking.

Combination powders give off a smaller amount of their gas when moistened and the balance after they are heated.

It should be possible to obtain good results from all types of powders, so far as leavening is concerned. Be sure to read the label on the can in order to know the type of powder being used and how much to use.

Sugar.—Either granulated or brown sugar may be used in flour mixtures. Brown sugar imparts a characteristic flavor due to the molasses which clings to the sugar crystals.

Molasses may also be used in some types of quick breads if its typical flavor is desired.

Eggs.—Eggs of good quality are desirable for baked products as for table use.

Spoons.—The equipment used in mixing doughs and batters influences the quality of the finished product. Light-weight wooden spoons of paddle shape are the most efficient for stirring and beating operations. Metal spoons, in addition to being of inferior shape for stirring and beating, may sometimes discolor the product. They are also less comfortable to hold.

Bowls.—Bowls of earthenware or glass which are heavy enough to prevent sliding about, and which are much smaller in diameter at the bottom than at the top, are the most convenient for mixing doughs and batters (see Fig. 8). The size should be suitable for the amount of mixture.

Egg Beaters.—Egg beaters are of three types, the rotary type, the turbine type in which a flat wheel runs parallel with the bottom of the bowl, and the wire mesh or whisk type. The rotary type, particularly if it has double

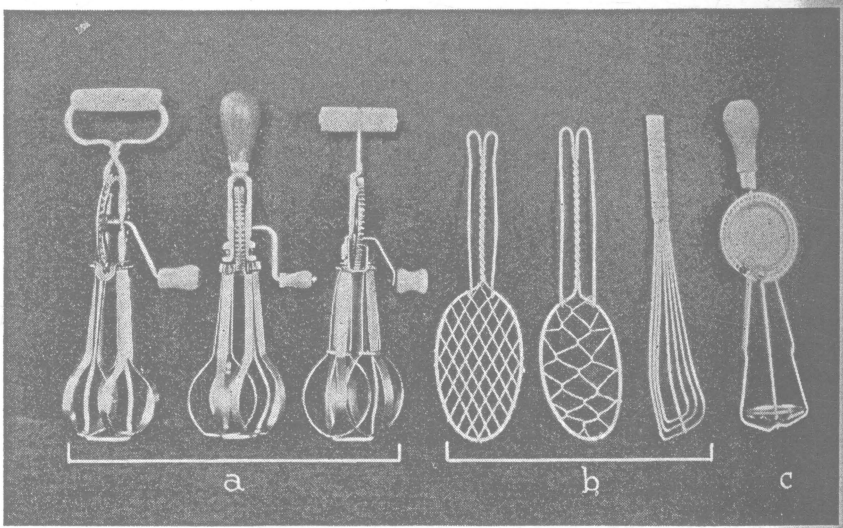


Fig. 3.—Various types of egg beaters: (a) rotary type; (b) whisk type; (c) turbine type.

wheels, beats more rapidly than the other types. Either rotary or turbine type is more satisfactory for beating egg yolks than the whisk type. Either rotary or whisk is efficient for beating whites, but if whisk is used a plate, platter, or other flat surface is better adapted to the over-and-over movement used with that type of beater. It is very easy to overbeat whites with the rotary beater unless the worker carefully watches the whites while beating. Somewhat larger cells and larger total volume usually result from use of the whisk in beating egg whites.

Baking Pans and Sheets.—Baking pans may be of tin, aluminum, Russia iron, cast iron, or oven glassware. Some studies seem to indicate that glassware is slower for baking purposes than tin or Russia iron, but faster than aluminum. Crusts are likely to be paler than on products baked in tin or

iron. It is important to know that bright surfaces reflect the heat away from the product being baked, while dark or dull surfaces absorb heat, thus baking the product more rapidly and producing a browner crust. If a light delicate crust is desired, as in angel food cake, a shiny surface on the baking pan is better for the purpose.

Baking sheets are preferable to pans with higher sides for baking products such as biscuits and cookies. The lower sides on the baking sheet permit better browning of the top surface of the product. Baking sheets should be heavy enough not to warp in the oven, and should be 2 to 4 inches smaller than the oven. If the sheet is of the same size as the oven, circulation of heat is interfered with, and the higher temperature of the pan which results from touching the oven walls may cause burning of the product.

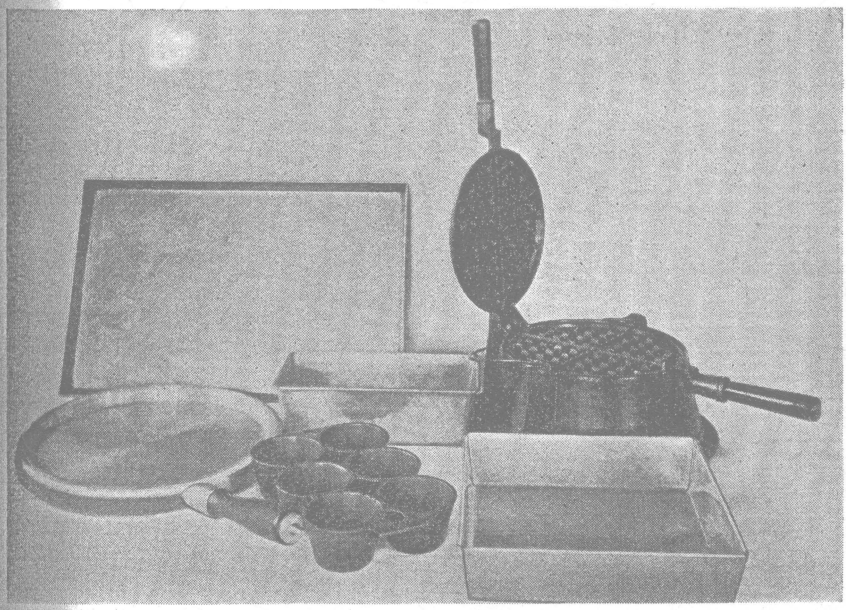


Fig. 4.—Pans for baking various quick breads.

Oven Temperatures

Methods of Heating Ovens.—Fires should be lighted under ovens long enough before they are needed to permit them to reach the desired temperature. Insulated and heat-controlled ovens require 20 to 25 minutes to reach the temperature on which the regulator is set. In ovens which are not equipped with thermostat, the heat is more easily controlled if the oven is gradually heated to the desired temperature by turning the fire only moderately high at first, and gradually increasing the heat if necessary.

The older types of oil stoves require a longer time for heating than gas and electric stoves. Sufficient time allowance should be made so that the

oven is ready when needed. Several newer type oil stoves heat about as rapidly as gas. Oil flames tend to creep up if they are lighted for a long time, and require turning down from time to time to avoid increase in temperature.

Ovens in coal and wood ranges are the most difficult of all to control. Products should not be placed in the oven until the fire has burned sufficiently for the heat to pass its maximum. From that time on the heat is decreasing in intensity. Exact temperatures and temperatures which are varied in intensity are probably not so easily obtained in the oven heated by coal or wood. Some women experienced in the use of coal or wood ranges believe that better results are obtained if temperatures 50 to 75 degrees lower are used for baking than would be used in other types of stoves. The reason for this opinion is not clear, since it would seem that the source of heat should make no difference.

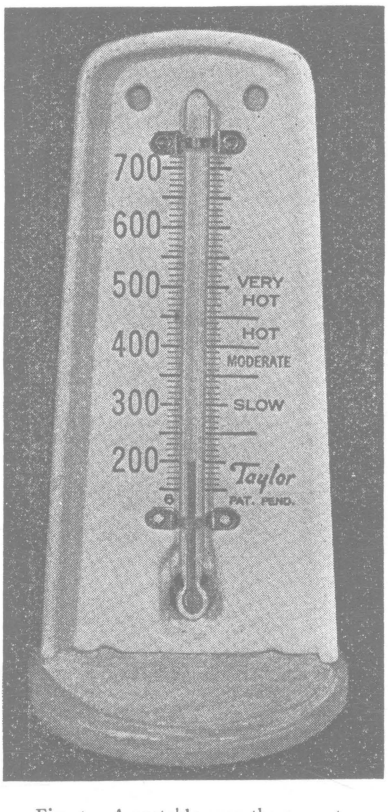


Fig. 5.—A portable oven thermometer.

Oven Thermometers.—It is important to have a good portable oven thermometer for registering oven temperature if no thermostat is built into the stove. A good thermometer can be had for about $1.50, and the thermometer is more durable if the bulb is wired rather than cemented to the frame.

The placement of the portable thermometer that best registers the temperature which corresponds to the thermostat-controlled oven is *center front*. Heat indicators which are built into oven doors are much less dependable than portable thermometers used in the oven. Heat indicators are sometimes of cheap quality and unreliable. Some indicators that are built into the door register a lower temperature than exists further back in the oven.

Terms Applied to Oven Temperatures.—The terms low, moderate, hot, and very hot, as applied to oven temperatures, are represented by the ranges of temperatures as stated below:

Low	250° to 350° F.
Moderate	350° to 400° F.
Hot	400° to 450° F.
Very hot	450° to 550° F.

Favorable Temperatures and Time Periods for Baking Quick Breads

Type of Mixture	*Temperature of Baking*	*Time for Baking*
Muffins	425° F.	20 to 25 minutes
Biscuits	400-450° F.	12 to 15 minutes
Popovers	450° F.	10 to 15 minutes
	Reduce to 350° F.	30 to 45 minutes
Quick loaf Breads	350° F.	50 to 60 minutes
Cornbread	400° F.	20 to 30 minutes

GENERAL DIRECTIONS AND METHODS FOR MAKING DOUGHS AND BATTERS

Light fire under oven.

Assemble ingredients and equipment before starting to work.

Prepare pans before starting mixture. Pans for baking roll cookies or roll biscuits usually require no preparation. Angel or sponge cake pans are also not greased, but practically all other pans require greasing, preferably with melted, unsalted fat. Cake pans may also be lightly floured by tossing a tablespoon of flour over the greased surface and discarding the surplus, or may be prepared by fitting a sheet of waxed paper or light weight plain paper exactly into the bottom. The top of the paper is greased after the paper is in place on the greased pan.

If iron muffin pans are used they are warmed slightly before using.

Sift and measure flour. It is convenient to use heavy waxed or brown paper on which to sift flour for measuring.

If dry ingredients are to be sifted together, sift them after measuring the sifted flour.

In mixing most doughs and batters it is better to have ingredients at room temperature rather than at refrigerator temperature, because ingredients at room temperature blend more easily, quickly, and efficiently. Also, eggs may be more easily beaten and expand to slightly larger volume if at room temperature. In very warm weather, however, it may be necessary to avoid allowing them to stand too long in a warm room.

Methods for Mixing Doughs and Batters

Muffin method.

Sift dry ingredients together into bowl which is to be used for mixing.

Beat egg.

Add liquid to egg.

Add melted fat to egg and liquid.

Add liquid ingredients to dry ingredients. Stir until liquid and dry ingredients are blended.

Thin batters may be stirred more than batters of the consistency of muffins.

2. Cake method.—While several methods of mixing may be used successfully for cakes, the cake method is usually understood to mean:

Creaming of fat.
Gradually adding sugar and continuing to cream.
Adding egg yolks and beating thoroughly.
Adding sifted dry ingredients and liquid alternately.
Adding beaten egg whites.
Flavoring may be added to creamed mixture, to liquid, or while adding flour and liquid. Extra stirring to add flavoring should be avoided by adding flavoring before the end of the process.

3. Pastry method.

Sift dry ingredients.
Cut in fat with knives or spatulas or work in fat with fingers.
Add liquid.

A few special methods are used for such products as cream puffs, hot water pie crust, hot water gingerbread, and sponge cakes.

Muffins

Foundation Recipe

2¼ c. pastry flour
or
2 c. family flour
4 t. baking powder—tartrate or phosphate
or 3 t. combination powder
½ to ¾ t. salt
½ to 2 T. sugar
1 egg
1 c. milk
3 T. melted fat

Method.—Sift dry ingredients together in bowl which is to be used for mixing. Beat egg. Add liquid to egg. Add melted fat to liquid ingredients. Turn liquid all at once and immediately into dry ingredients and stir until dry ingredients are just dampened (about 25 revolutions). Fill greased muffin pans about one-half or two-thirds full of batter. Bake in a hot oven (425° F.) for 20 to 25 minutes.

Note—A muffin batter when mixed should have a lumpy appearance and should drop sharply instead of stringing from the spoon. If over-manipulated, the batter will appear smooth.

Variations of Recipe

Graham Muffins—

Use 1 c. white family flour
1 c. graham flour

Brown sugar or molasses may be used instead of white sugar if desired. If molasses is used, combine with liquid.

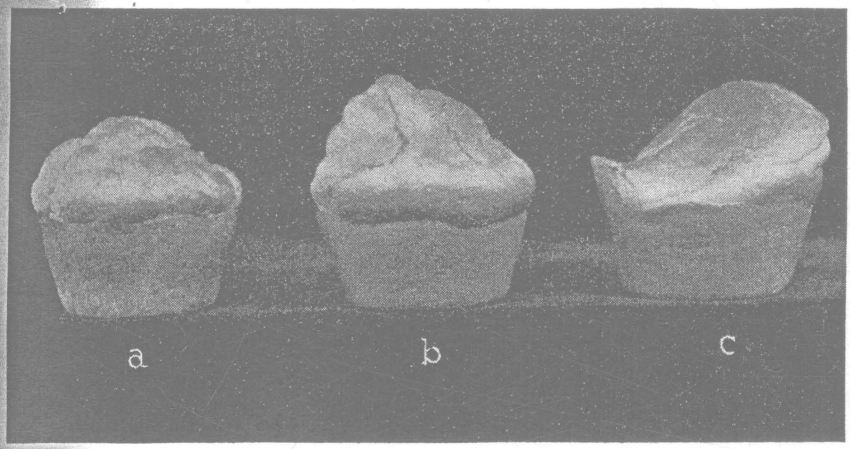


Fig. 6.—External appearance of good and poor muffins:

(a) Note rounded pebbly top of good muffin.

(b) Note peak and smooth top crust of over-manipulated muffin.

(c) Note side peak or knob of over-manipulated muffin.

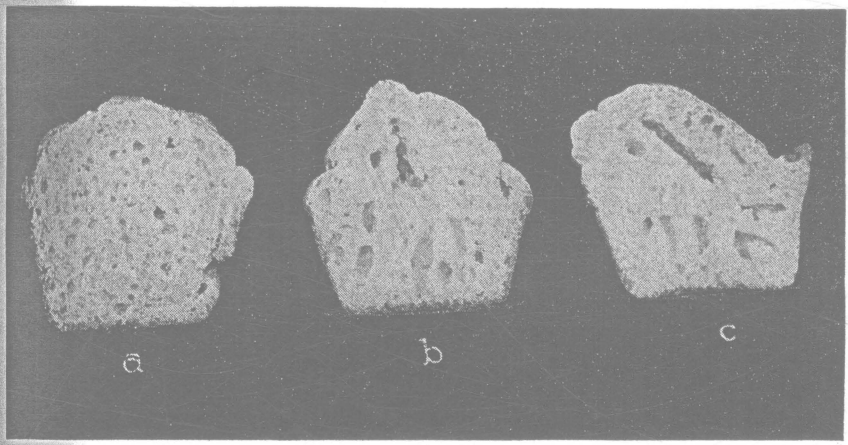


Fig. 7.—Interior appearance of good and poor muffins:

(a) Note even texture of good muffin.

(b) and (c) Note large holes and tunnels in over-manipulated muffins. Tunnels follow direction of peak or knob.

Bacon Muffins.—Use family flour. Reduce fat to 1½ T. Add cooked diced bacon to liquid just before combining with dry ingredients.

Orange Muffins.—Use orange juice instead of milk. Use 3 T. sugar. Add 1½ T. grated orange rind (lightly measured) to liquid.

Nut Muffins.—Use family flour or half whole wheat flour. Add ½ c. chopped nuts before stirring.

Surprise Muffins.—Use foundation muffin. Fill muffin pans one-fourth full. Place on top of batter ½ to 1 t. jam or jelly. Cover with more batter. Bake.

Bran Muffins

¾ c. fine bran
1½ c. family flour
½ t. soda
½ t. salt
3 T. brown sugar or molasses
1 egg
1 c. thick sour milk
3 T. melted fat
2 t. tartrate or phosphate baking powder
or
1½ t. combination baking powder

Combine as for white muffins. If molasses is used, add to liquid.

Biscuits

Foundation Recipe

2 c. pastry or family flour
4 t. tartrate or phosphate baking powder
or
3 t. combination baking powder
½ to ¾ t. salt
4 T. fat
⅝ to ⅔ c. milk

Sift dry ingredients into bowl which is to be used for mixing. Cut or rub in fat until mixture has a coarse granular appearance. Add enough liquid to form a soft dough and combine thoroughly; the dough should be as soft as can be conveniently handled. Turn dough out on lightly floured board, gather up into a ball, and knead lightly until dough appears somewhat smooth. Brush excess dry flour on outside of dough. Roll to ½ or ¾ inch thickness. Dip cutter into flour, cut biscuits, and place upon ungreased baking sheet. If soft biscuits are desired place about 1 or 1½ inches apart. Otherwise, biscuits may touch. Bake in hot oven (425° F.) for 12 to 15 minutes.

Variations of Biscuits

Pinwheel Biscuits.—Roll biscuit dough to about ⅜ inch thickness and spread with melted butter. Sprinkle with one of the following: brown sugar; brown sugar and cinnamon; brown sugar and currants or raisins. The dough may be spread with marmalade or with grated cheese.

Roll the dough as for jelly roll; slice off pieces of ¾-inch thickness and place cut side down on baking sheet. Bake as directed in foundation recipe.

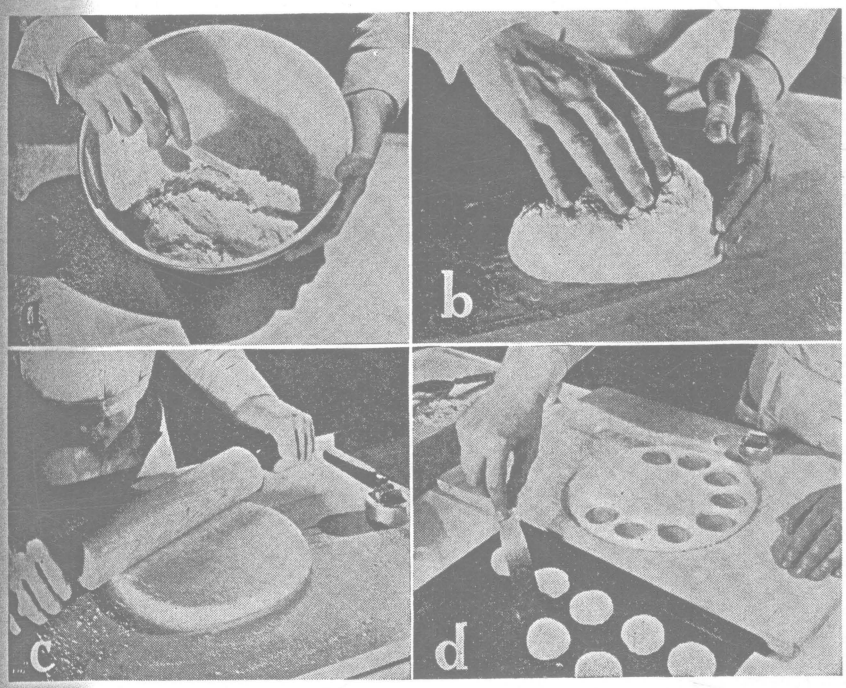


Fig. 8.—Steps in making biscuits: (a) mixing; (b) kneading; (c) rolling; (d) cutting.

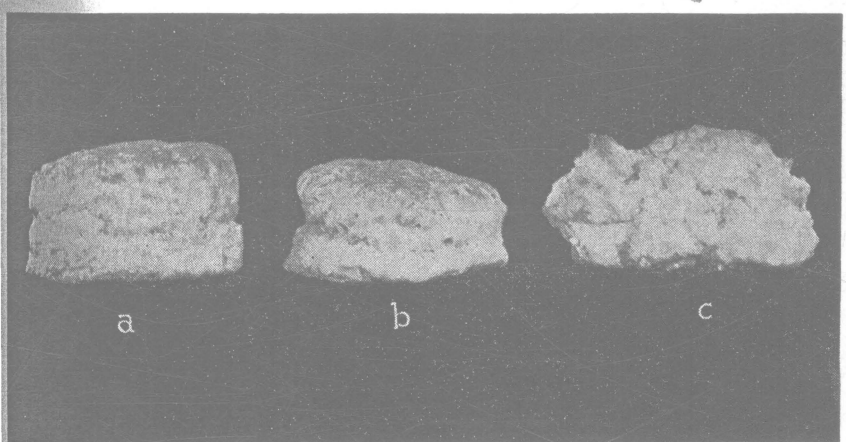


Fig. 9.—Biscuits:

(a) Biscuit from lightly kneaded dough. Note symmetrical shape, smooth crust and large volume.

(b) Biscuit from dough which has not been kneaded. Note small volume and coarser appearance.

(c) Drop biscuit. Note irregular shape which is characteristic of this type of biscuit.

Cheese Biscuits.—Rub ⅓ to ½ c. grated cheese into the flour with the fat, or add ⅓ to ½ c. grated cheese to flour-fat mixture just before adding liquid.

Orange Biscuits.—Add 2 T. grated orange rind to flour-fat mixture. After biscuits are cut dip one-half piece of loaf sugar into orange juice and press into the top of each biscuit.

Drop Biscuits.—Use ingredients listed in foundation recipe. Increase liquid to about ¾ c. The mixture should be too moist to handle but not enough to require scraping from the spoon. Drop the mixture by scant tablespoons 1 or 1½ inches apart upon slightly greased baking sheet, and bake as for foundation recipe.

Egg Biscuits.—Decrease fat in foundation recipe to 1 T. Substitute one beaten egg and ½ c. cream for milk. Mix and bake as for foundation recipe.

Short Cake

2 c. pastry flour
4 t. tartrate or phosphate baking powder
or
3 t. combination powder
1 T. sugar
½ t. salt
6 T. fat
⅝ c. milk

Sift dry ingredients together. Cut or work in fat. Add milk and combine well. Turn out on lightly floured board, and knead lightly until smooth in appearance. Roll to ½ inch thickness; cut with 3- or 3½-inch cutter. Place half of biscuits upon baking sheet, grease tops with melted butter and cover each with another biscuit. This gives a double biscuit easily broken apart. The dough may also be rolled to ¾-inch thickness and cut with large cutter or baked in one piece. Bake and split when ready to use. Spread lower half with butter, then with fruit, and cover with upper half. Pour crushed fruit over top. Strawberries, raspberries, orange, or pineapple are especially nice fruits to use. Whipped cream may be used on top. An egg biscuit recipe may be preferred for shortcake.

Quick Coffee Cake

6 T. sugar
2 c. pastry flour
3 t. tartrate or phosphate baking powder
or
2 t. combination powder
¾ t. salt
5 T. fat
1 egg
⅓ c. milk

Topping

1½ T. melted butter
1 T. flour
4 T. sugar
½ t. cinnamon

Sift together all dry ingredients. Cut in fat. Combine beaten egg and milk. Add to dry ingredients all at once and blend thoroughly. Turn into greased 9-inch layer pan and spread out to even thickness. Brush top with

melted butter and sprinkle with mixture of sugar, flour, and cinnamon. Bake in hot oven (400° F) 25 to 30 minutes. Cut in pan and remove pieces with spatula.

Dutch Apple Cake

Prepare quick coffee cake mixture. Spread out to 1½-inch thickness in shallow pan. Press thin slices of apples into top. Sprinkle brown sugar and cinnamon over apples. Bake as directed for quick coffee cake.

Quick Loaf Breads

Orange-Nut Bread

2 c. family flour
¼ t. salt
2 t. baking powder (any type)
1 t. soda
½ c. sugar
1 large orange
Boiling water
About 1 c. chopped dates or raisins
2 T. fat
1 t. vanilla
1 egg
½ c. chopped nuts

Sift dry ingredients, except sugar, together. Wash orange and extract the juice; put into a cup, and fill cup with boiling water. Put orange rind through food chopper. Put into a cup and add chopped raisins or dates to fill the cup. Place fruit in bowl; add juice and boiling water. Add fat, sugar, and

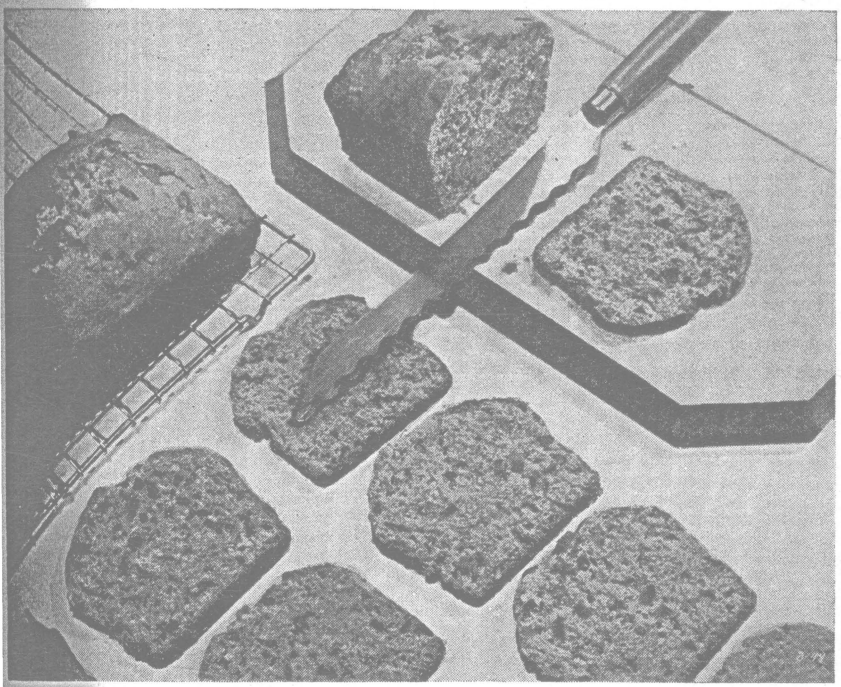


Fig. 10.—Loaf bread. A good loaf bread should slice without crumbling.

vanilla. Stir until well blended, then add beaten egg and dry ingredients. Stir until well mixed, then add nuts. Pour into greased loaf pan and bake in moderate oven (350° F.) for about 50 to 60 minutes. Cool in pan before slicing.

Nut Bread

2 c. family or bread flour
⅜ c. sugar
4 t. tartrate or phosphate baking powder
or
3 t. combination powder
½ to 1 t. salt
5 T. crisco
1 egg
1 c. milk
½ c. chopped nuts

Mix as for muffins. Bake at 350° F. for 50 to 60 minutes.

Variations:

Substitute whole wheat or graham flour for part or all of the white flour.
Substitute ½ c. chopped dates and nuts for nuts.
Substitute ½ c. chopped green olives and nuts for nuts.
Substitute ½ c. green olives for nuts.
Substitute ½ c. raisins and nuts for nuts.

STEAMED BROWN BREAD

1 c. whole wheat or graham flour
1 c. corn meal
1 c. rye meal or ground rolled oats
3 t. baking powder (any type)
1 t. soda
1 t. salt
¾ c. molasses
1⅓ c. sour milk

Mix dry ingredients. Combine molasses and milk and add to dry ingredients. Stir until well mixed. Pour into greased cans, filling two-thirds full. Cover, and steam 2½ to 3 hours.

CORN BREAD

1 c. flour
¾ c. yellow corn meal
1 t. salt
2½ t. baking powder (any type)
2 T. sugar
1 egg
1 c. milk
2 T. melted fat

Sift dry ingredients together. Add the unbeaten egg and milk which have been combined. Stir until lightly mixed. Stir in the melted fat. Pour the batter into greased shallow pans to a depth of about ¾ inch. Bake in hot oven (400° F.) for 20 to 30 minutes.

POPOVERS

1 c. flour
¼ t. salt
2 eggs
1 c. milk
1 t. melted fat

Sift dry ingredients together. Beat eggs. Add milk and melted fat to eggs. Combine liquid gradually with dry ingredients to avoid lumping. Fill greased muffin pans one-half or two-thirds full of batter.

Bake 10 to 15 minutes in hot oven (450° F.). Reduce temperature to moderate (375° F.) and continue baking for a total of 45 to 60 minutes, depending on size of popovers. Popovers must be thoroughly baked or they will collapse. They are hollow and slightly moist inside and very crusty.

Spoon Bread

3 c. milk
1 t. salt
1 c. cornmeal
2 eggs
2 T. butter

Mix meal with 2 cups milk and salt. Bring to the boiling point and boil about 5 minutes, stirring to avoid burning. Add butter and stir until melted. Remove from fire.

Beat eggs well. Add remainder of milk to eggs. Combine milk and egg with cooked batter. Pour into greased baking dish and bake in hot oven (400° F.) for about one hour. Serve with a spoon from the dish in which it is baked.

Waffles

(about 5 waffles)

2 eggs
1 c. milk
4 T. melted fat (if butter, ⅓ c.)
1⅓ to 1¾ c. pastry flour
½ t. salt
2½ t. baking powder (any type)

Sift dry ingredients together, using the smaller amount of flour if a thin batter is desired.

Beat egg yolks. Add milk. Add melted fat to egg yolk and milk mixture. Combine liquid with dry ingredients and stir until well blended. Beat egg whites stiff and add to batter.

Iron waffle irons should be hot and well greased. Turn iron frequently to brown both sides of waffle.

Electric waffle irons do not require greasing.

Sour cream waffles may be made by omitting fat and substituting sour cream for milk. Use ½ t. soda for 1 c. of sour cream, and decrease baking powder about one-half.

Sweet Milk Griddle Cakes

2¼ c. pastry flour
2 c. family flour
½ to ¾ t. salt
4 t. tartrate or phosphate baking powder
3 t. combination powder
2 t. sugar
2 eggs
1½ c. milk
3 T. melted fat

Sift dry ingredients together. Beat eggs. Add milk and melted fat. Combine liquid with dry ingredients and stir until well blended.

Cook by spoonfuls on hot griddle. When bubbles appear turn cakes and brown other side. Turn cakes only once.

Sour Cream Griddle Cakes

2 – 2¼ c. pastry flour
1 t. baking powder (any type)
2 c. thick sour coffee cream (dilute 1 c. whipping cream with equal amount of sour milk)
½ – ¾ t. salt
1 t. soda
2 eggs

Sift dry ingredients together. Beat eggs. Add cream to eggs. Add liquid to dry ingredients and blend well.

Cook by spoonfuls on hot griddle. When bubbles appear, turn cakes and brown other side.

Sour Milk Griddle Cakes

2 – 2¼ c. pastry flour
1 t. baking powder (any type)
½ to ¾ t. salt
2 c. clabbered milk or thick buttermilk
1 t. soda
2 eggs
2 T. melted fat

Sift dry ingredients together. Beat eggs. Add liquid to eggs. Combine liquid with dry ingredients and blend well. Cook by spoonfuls on hot griddle.

Cornmeal Griddle Cakes

Good cornmeal cakes may be made by substituting cornmeal for one-third to one-half the flour in the sour cream or sour milk recipes.

Index

The Agricultural Extension Service acknowledges the courtesy of the Consumer Service, Department of General Foods Corporation, New York City, in furnishing illustrations on pages 5, 11, and 17.